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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,458	01/14/2002	Carl S. Brown	11532-036001	1033

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EXAMINER

KASSA, YOSEF

ART UNIT PAPER NUMBER

2625

DATE MAILED: 02/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,458

Applicant(s)

BROWN ET AL.

Examiner

YOSEF KASSA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/14/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because the drawing submitted is not an original drawing. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansson et al (4,760,385) further in view of Erler et al (5,687,251).

With regard to claim 1, Jansson et al discloses collecting calibration data (that is, calibrated image pixel obtained from a look-up table col. 5, lines 17-18); determining the positioning and orthogonality errors from the calibration data (see col. 5, lines 19-22, the

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maximum mosaic image size is computed and displayed as a rectangular mosaic image marker).

Jansson et al did not explicitly call for creating a solution model based on positioning and orthogonality data. In the same field of endeavor, However, Erler et al (see col. 5, lines 61-col. 6, lines 1-7) teach this feature. At the time of the invention, it would have been obvious to incorporate the teaching of Erler et al specimen image processing system and into Jansson et al system. The motivation for doing so is to that, the digitizing of a specimen image obtained from a microscope or other modified to create a digital specimen image see col. 2, lines 34-40 of Erler et al.

With regard to claim 2, Erler et al disclose further comprising modifying the position an image area based on the solution model (see col. 6, lines 1-7).

With regard to claim 3, Jansson et al discloses further comprising modifying the positioning of a mechanical system to compensate for errors based on the solution model (see col. 5, lines 34-lines 17-22).

With regard to claim 4, Jansson et al discloses further comprising determining calibration data based on stepping data (see col. 5, lines 17-22).

With regard to claim 5, Jansson et al discloses further comprising determining calibration data based on slide data using a reference slide (see col. 2, lines 45-49 and Fig. 3B item 213 of Jansson et al).

With regard to claim 6, Jansson et al discloses further comprising determining calibration data based on sub-spot data (see Fig. 3B item 214).

With regard to claim 7, Jansson et al discloses further comprising determining calibration data based on absolute data (see col. 4, lines 29-36).

With regard to claim 8, Jansson et al discloses determining calibration data; creating adjustment parameters based on the calibration data (see col. 5, lines 17-22); applying the adjustment parameters to position a first portion of the plurality of specimens within a scan area (see col. 2, lines 38-44); obtaining an image of the first portion of the plurality of specimens (see col. 2, lines 15-19); applying the adjustment parameters to position a second portion of the plurality of specimens within a scan area (see col. 2, lines 38-44); obtaining an image of the second portion of the plurality of specimens (see col. 2, lines 20-25); and combining the image of the first portion and the image of the second portion to create the image of the plurality of specimens (see col. 2, lines 20-25).

With regard to claim 9, Jansson et al discloses obtaining an image of a plurality of portions of the plurality of specimens, wherein a location of each of the plurality of portions is adjusted based on the adjustment parameters; and stitching together each of the images of the plurality of portions of the plurality of specimens (see col. 3, lines 7-15).

Claims 10-13 are similarly analyzed as claims 4-7.

With regard to claim 14, Jansson et al discloses a staging area which moves relative to a camera (see col. 5, lines 34-37); a processor which collects calibration data from the staging area (see col. 6, lines 1-7), wherein the processor creates an

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adjustment algorithm to modify movement of the staging area to compensate for the calibration data (see col. 5, lines 12-22).

With regard to claim 15, Jansson et al discloses wherein the calibration data is based on a bright spot within the scan area (see col. 9, lines 49-56).

With regard to claim 16, Jansson et al discloses wherein the staging area is positioned to collect a plurality of images, each of the plurality of images comprising a portion of the total desired image (see col. 3, lines 37-33).

With regard to claim 17, Jansson et al discloses wherein each of the plurality of images is assembled to form the total desired image (see col. 3, lines 7-12).

With regard to claim 18, Jansson et al discloses wherein the calibration data is obtained without the use of a reference slide (see col. 5, lines 17-20).

Claim 19 is similarly analyzed as claim 5.

Other Prior Art Cited

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6,272,235) to Bacus et al discloses method and apparatus for creating a virtual microscope slide.

US Patent No. (5,787,208) to Oh et al discloses image enhancement method and apparatus.

US Patent No. (6,485,413) to Boppart et al discloses method and apparatus for forward directed optical scanning instruments.

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US Patent No. (6,185,444) to Ackerman et al discloses solid state magnetic resonance imaging.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

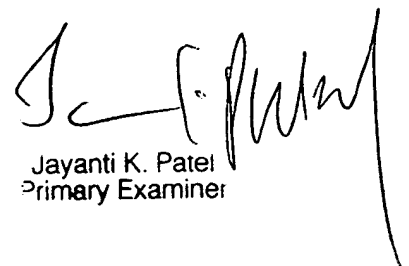
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communication and (703) 872-9314 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

PATENT EXAMINER

Yosef Kassa

02/07/03.


Jayanti K. Patel
Primary Examiner